

REMARKS

Claims 20, and 22-36 are in this application. The subject matter of claim 21 has been incorporated into claim 20.

The Examiner has rejected claims 20, 26, 28, 30-34 and 36 under 35 USC 102 (e) as being anticipated by Ramakarishna (U.S. Patent No. 6,420,146); rejected claims 24-25, 27 and 35 as being obvious over this same reference and claims 29 as being obvious over this patent and further in view of Husain et al. (US Patent 6,361,695). Applicants respectfully traverse these rejections.

In view of the incorporation of the subject matter of claim 21 into claim 20, these rejections are moot and it is respectfully requested that these rejections be withdrawn. Applicants preserve all rights to file additional arguments to distinguish the claimed invention from the references cited.

The Examiner has rejected claims 21-23 as being obvious over the combination of Ramakrishna (US Patent 6,420,146) and Yuan (US Patent 6,153,416). Applicants respectfully traverse this rejection.

As stated in the previous response U.S. Patent 6,420,146 is inapplicable and therefore there is no combination with U.S. Patent '416 that makes this invention obvious. As also presented in the previous response, U.S. Patent '416 teaches away from the instant invention. The focus in U.S. Patent '416 is on a selection of polymers in which the microorganism can be immobilized. U.S. Patent '416 specifically teaches that natural immobilization techniques often provides less than optimal results and are disadvantageous, column 1 lines 17-50. In fact, the entire teaching in U.S. Patent '416 is towards selection of polymer mixture which would enable immobilization. The teaching in U.S. Patent '416 is not towards the natural polymers such as alginates alone for immobilizing the microbial consortia. The instant invention on the other hand clearly demonstrates that the use of

natural polymers alone provides good results in the preparation of stable biosensing granules for assessment of biodegradability of wastewater. Furthermore, the '146 patent teaches using the resulting beads for removing inorganic nitrogen or organic carbon from waste water or for making biochemical products.

U.S. Patent '416 when read in combination with U.S. Patent '146 does not provide any guidance to teach towards the instant invention. It is true that U.S. Patent '416 mentions that apart from enzymes, waste water treatment microorganisms can also be immobilized. However, to arrive at the instant invention, a skilled reader would have to disbelieve the teaching in U.S. Patent '416 that natural polymer immobilization methods are ineffective or disadvantageous, and that any polymer, whether natural or synthetic can be used, and then apply the protocol of U.S. Patent '146, after determining the specific parameters such as growth media, conditions for aeration, the MLSS values, incubation times and temperatures, etc. In addition, there is no disclosure or suggestion that waste water treatment microorganisms would be the yeast *Sacchromyces ssp.* Claim 20 defines culturing the active aerobic microbial consortia and there is no disclosure or suggestion in the '416 patent waste water treatment organisms can be cultured as set out in claim 20. There is no combination of these references where one skilled in the art would have a reasonable expectation of success.

Therefore, it is respectfully requested that the rejection be withdrawn.

The Examiner has rejected claims 20, 24-28 and 30-36 under the judicially created doctrine of obviousness type double patenting as being unpatentable over the claims of U.S. Patent 6,420,146. The Examiner has rejected claim 29 under the judicially created doctrine of obviousness type double patenting as being unpatentable over the claims of U.S. Patent 6,420,146 in view of Husnain. In view of new claim 20, the rejections are moot and it is respectfully requested that the rejections be withdrawn.

As to the rejection of claims 21-23 under the judicial created document of obviousness type double patenting over Yuan U.S. Patent 6,153,416, and claims 1-16 of U.S. Patent 6,420,146 applicants respectfully traverse this rejection. Claims 1 -15 of US patent 6,420,146 defines a process for enhancing the production of ethanol. Claim 20 defines a process for preparing stable and reusable biosensing granules useful in assessing biodegradability of an effluent. There is no suggestion in the '146 patent that the yeast beads of step (c) or the yeast crystals of claim 16 could be useful in assessing biodegradability of an effluent.

Therefore it is respectfully requested that this rejection be withdrawn.

Applicants submit that the present application is in condition for allowance and favorable consideration is respectfully requested.

Respectfully submitted



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